

PATENT

Docket No. 10235/10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : Kazuo SHIOZAKI et al.

SERIAL NO. : (Unassigned)

FILED : 20 November 2001

FOR : ENVIRONMENTAL STRESS RESPONSIVE PROMOTER

GROUP : (Unassigned)

EXAMINER : (Unassigned)

ASSISTANT COMMISSIONER  
FOR PATENTS  
Washington, DC 20231

PRELIMINARY AMENDMENT

SIR:

Prior to examination of the above-identified application, please enter the following amendments.

In the Claims:

Please amend the claims as follows:

1. An environmental stress responsive promoter comprising DNA of the following (a), (b) or (c):
  - (a) DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 1 to 8;
  - (b) DNA consisting of a nucleotide sequence comprising a deletion, substitution or addition of one or more nucleotides relative to any nucleotide sequence selected from SEQ ID NOS: 1 to 8, and functioning as an environmental stress responsive promoter; and
  - (c) DNA hybridizing under stringent conditions to DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 1 to 8,

- and functioning as an environmental stress responsive promoter.
2. An environmental stress responsive promoter comprising DNA of the following (a), (b) or (c):
    - (a) DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 9 to 18;
    - (b) DNA consisting of a nucleotide sequence comprising a deletion, substitution or addition of one or more nucleotides relative to any nucleotide sequence selected from SEQ ID NOS: 9 to 18, and functioning as an environmental stress responsive promoter; and
    - (c) DNA hybridizing under stringent conditions to DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 9 to 18, and functioning as an environmental stress responsive promoter.
  3. The promoter according to claim 1, wherein the environmental stress is at least one selected from the group consisting of cold stress, drought stress, salt stress and high photo stress.
  4. An expression vector comprising the promoter according to claim 1.
  5. The expression vector according to claim 4, into which a desired gene is further incorporated.
  6. A transformant comprising the expression vector according to claim 4.
  7. A transgenic plant comprising the expression vector according to claim 4.
  8. The transgenic plant according to claim 7, wherein the plant is a plant body, plant organ, plant tissue or plant culture cell.
  9. A method for producing a stress-resistant plant, which comprises culturing or cultivating the transgenic plant according to claim 7.

Please add the following new claims:

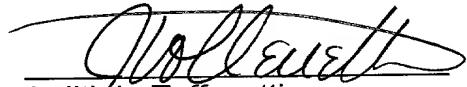
10. The promoter according to claim 2, wherein the environmental stress is at least one selected from the group consisting of cold stress, drought stress, salt stress and high photo stress.
11. An expression vector comprising the promoter according to claim 2.
12. An expression vector comprising the promoter according to claim 3.
13. The expression vector according to claim 11, into which a desired gene is further incorporated.
14. The expression vector according to claim 12, into which a desired gene is further incorporated.
15. A transformant comprising the expression vector according to claim 5.
16. A transgenic plant comprising the recombinant vector according to claim 5.
17. A method for producing a stress-resistant plant, which comprises culturing or cultivating the transgenic plant according to claim 8.

**REMARKS**

Claims 3, 4, 6, 7 & 9 have been amended to delete the multiple dependencies and new claims 10-17 have been added to recover some of the matter thus deleted. Attached hereto is a marked-up version of the changes made. The attached pages are captioned "**Version with markings to show changes made.**" Examination in light of these amendments is respectfully requested.

Respectfully submitted,

KENYON & KENYON

  
\_\_\_\_\_  
Judith L. Toffenetti  
(Reg. No. 39,048)

Date: 20 November 2001

KENYON & KENYON  
1500 K Street, NW, Suite 700  
Washington, D.C. 20005

Tel. (202) 220-4200  
Fax. (202) 220-4201

TOFFENETTI 389091 2001

**Version with markings to show changes made**

**In the Claims:**

Claims 3, 4, 6, 7 and 9 have been amended as follows:

1. An environmental stress responsive promoter comprising DNA of the following (a), (b) or (c):
  - (a) DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 1 to 8;
  - (b) DNA consisting of a nucleotide sequence comprising a deletion, substitution or addition of one or more nucleotides relative to any nucleotide sequence selected from SEQ ID NOS: 1 to 8, and functioning as an environmental stress responsive promoter; and
  - (c) DNA hybridizing under stringent conditions to DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 1 to 8, and functioning as an environmental stress responsive promoter.
2. An environmental stress responsive promoter comprising DNA of the following (a), (b) or (c):
  - (a) DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 9 to 18;
  - (b) DNA consisting of a nucleotide sequence comprising a deletion, substitution or addition of one or more nucleotides relative to any nucleotide sequence selected from SEQ ID NOS: 9 to 18, and functioning as an environmental stress responsive promoter; and
  - (c) DNA hybridizing under stringent conditions to DNA consisting of any nucleotide sequence selected from SEQ ID NOS: 9 to 18, and functioning as an environmental stress responsive promoter.
3. The promoter according to claim 1 [or 2], wherein the environmental stress is at least one selected from the group consisting of cold stress, drought stress, salt stress and high photo stress.

4. An expression vector comprising the promoter according to [any one of claims 1 to 3] claim 1.

5. The expression vector according to claim 4, into which a desired gene is further incorporated.

6. A transformant comprising the expression vector according to claim 4 [or 5].

7. A transgenic plant comprising the expression vector according to claim 4 [or the recombinant vector according to claim 5].

8. The transgenic plant according to claim 7, wherein the plant is a plant body, plant organ, plant tissue or plant culture cell.

9. A method for producing a stress-resistant plant, which comprises culturing or cultivating the transgenic plant according to claim 7 [or 8].

The following new claims have been added:

10. The promoter according to claim 2, wherein the environmental stress is at least one selected from the group consisting of cold stress, drought stress, salt stress and high photo stress.

11. An expression vector comprising the promoter according to claim 2.

12. An expression vector comprising the promoter according to claim 3.

13. The expression vector according to claim 11, into which a desired gene is further incorporated.

14. The expression vector according to claim 12, into which a desired gene is further incorporated.

15. A transformant comprising the expression vector according to claim 5.

16. A transgenic plant comprising the recombinant vector according to claim 5.
17. A method for producing a stress-resistant plant, which comprises culturing or cultivating the transgenic plant according to claim 8.